EPA's Technical Comments on Locus Technologies' First Quarter Report, 811 East Arques, Sunnyvale, California dated May 9, 2017

- 1. Supporting field data sheets for soil vapor and groundwater sampling should be included as an Appendix to the report. These data are necessary to confirm the validity of sampling protocol used during the study.
- 2. Injection and field monitoring data sheets, logs, and construction details for soil gas wells related to the treatability study should be included in an Appendix as supporting documentation to confirm that field activities were conducted in accordance with Section 4.0 of the Work Plan.
- 3. A further discussion of results of post-injection monitoring should be included to confirm design specifications and assumptions presented in the Treatability Study Work Plan (Work Plan). There is no indication in the report whether the desired geochemical and biological processes are occurring, per Work Plan Section 3.5 (Data Analysis and Interpretation).
- 4. Attachment A: The plot scales and groupings should be reevaluated to make them more useful and representative of the changes occurring. Very little information is gained as presented.
- 5. Table 2: The reported not-detected values for many critical volatile organic compounds (VOCs) are significantly higher than regulatory limits. In accordance with EPA SW-846 (EPA, 1996), the analytical laboratory should conduct analyses on multiple dilutions/quantitation on the same sample so that no critical analytes are diluted out and no false negative data are reported.
- 6. Table 2: The Work Plan included analysis of hydrogen by Method AM20GAX as part of the analytical suite. No hydrogen values are reported. If analysis was conducted, include results in Table 2, if not, please discuss why not and confirm hydrogen will be included in the second quarterly sampling report.
- 7. Table 4: In accordance with the Advisory Soil Gas Investigation (California Department of Toxics Substances, 2015), and Work Plan Section 3.3.1, the minimum methane detection limit is set at 0.5 percent or 5,000 parts per million volume. This limit was exceeded in the November 21, 2016 monitoring event. An alternate analytical method should be employed if ASTM D1946-90 cannot attain the required minimum detection limit.

EPA's Technical Comments on Locus Technologies' Second Quarter Report, 811 East Arques, Sunnyvale, California dated September 7, 2017

- 1. Results of analyses indicate that the implementation of the treatability study is successfully reducing targeted contaminants of concern. Subsurface conditions appear to be conducive for continued degradation of targeted contaminants.
- 2. Please include as a table in the main body of the report or as an Appendix cumulative results of analyses conducted during the treatability study. Various statements are made and graphs presented that are not supported by data included in the report.
- 3. Table 2: Analytical testing for total organic carbon was conducted, but not included in the Table 2 Groundwater Analytical Results. Please include all testing conducted during the reporting period.
- 4. The report states that monitoring activities were conducted in accordance with the EPA approved Treatability Study Work Plan (Work Plan) and Quality Assurance Project Plan (QAPP). Both of these supporting documents indicate that microbial analyses would be conducted quarterly during the monitoring period. No microbial results were included in the report. EPA requests that the approved sampling methodologies and frequencies be implemented.